User Guide for RoadNetworkPartitioning Application

Lucie Roy

May 2024

The application is started from the command line by the command:

java -jar RoadNetworkPartitioning.jar

User must have installed Java 11 or higher. After running, the application looks like this Fig. 1. After loading a graph via the Graph tab in the menu, the graph is drawn (see Fig. 2). After selecting a dividing algorithm (clicking on the Calculate button for one of them or on the Recalculate group button and selecting the appropriate radio button), the divided graph can be displayed as follows Fig. 3.

For all dividing algorithm testing, select Testing -> Test in the menu and a dialog for testing division algorithms will appear Fig. 4. To add new algorithms to the application, their implementation must meet the following conditions:

- 1. Its implementation must be written in the same programming language.
- 2. Its entire implementation must be compiled and its .class files must be in one JAR file and that must be in the lib folder.
- 3. In its implementation, there must be a non-abstract class that inherits from the abstract class APartitionAlgorithm found in the created application.

More in the electronic attachment in the file named testcases_en.pdf, where the most common use cases are listed and described.



Figure 1: Main Screen.

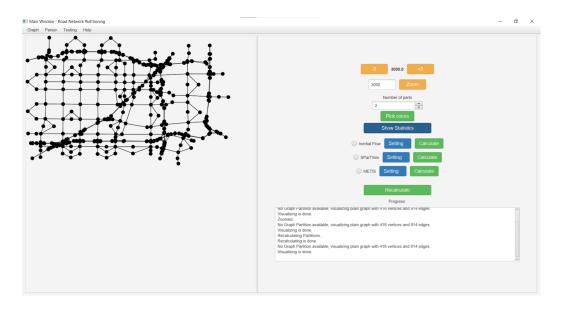


Figure 2: Graph visualization.



Figure 3: Graph Division.



Figure 4: Testing Dialog.